

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

Claims 1-9 - canceled.

10. (Currently amended) ~~An~~ A vibratable aperture plate comprising:
a plate body having a top surface, a bottom surface, and a plurality of apertures extending from the top surface to the bottom surface, wherein each aperture is defined by a generally conical cavity which extends from the bottom surface toward the top surface and a dome shaped cavity that extends from the top surface toward the bottom surface, and wherein the dome shaped cavity and the conical cavity have the same axis of symmetry ~~the apertures are tapered in a direction from the top surface to the bottom surface, and wherein the apertures have an exit angle that is in the range from about 30° to about 60°, and a diameter that is in the range from about 1 micron to about 10 microns at the narrowest portion of the taper.~~

11. (Original) An aperture plate as in claim 10, wherein the plate body is constructed from materials selected from a group consisting of palladium, palladium nickel and palladium alloys.

12. (Original) An aperture plate as in claim 10, wherein the plate body includes a portion that is dome shaped in geometry.

13. (Original) An aperture plate as in claim 10, wherein the plate body has a thickness in the range from about 20 microns to about 70 microns.

14. (Original) An aperture plate as in claim 10, wherein the apertures have an exit angle that is in the range from about 41° to about 49°.

Claims 15-30 - canceled.

31. (Original) An aperture plate comprising:

a plate body having a top surface, a bottom surface, and a plurality of apertures extending from the top surface to the bottom surface, wherein the apertures each include an upper portion and a lower portion, wherein the lower portion extends upwardly from the bottom surface and is generally concave in geometry, and wherein the upper portion is tapered in a direction from the top surface to the bottom surface and intersections with the lower portion.

32. (Original) An aperture plate as in claim 31, wherein upper portion has an angle of taper that is in the range from about 30° to about 60° at the intersection with the lower portion, and a diameter that is in the range from about 1 micron to about 10 microns at the intersection with the lower portion.

33. (Original) An aperture plate as in claim 32, wherein the lower portion has a diameter at the lower surface that is in the range from about 20 microns to about 200 microns, a height in the range from about 4 microns to about 20 microns.

34. (Original) An aperture plate as in claim 31, wherein the bottom surface is adapted to receive a liquid, and wherein the plate body is vibratable to eject liquid droplets from the front surface.

Claim 35 - canceled.

36. (New). An aperture plate as in claim 10, wherein the diameter of the conical cavity is at least about 1 micron.

37. (New) An aperture plate as in claim 10, wherein the dome shaped cavity has a height that is approximately one-third of the thickness of the plate body.

38. (New) An aperture plate as in claim 10, wherein the plate body has a thickness of at least about 20 microns.
